

AMENDMENTS TO THE CLAIMS

1. (currently amended): A method for identifying an antiviral candidate molecule, which comprises contacting a test molecule with a nucleic acid comprising a nucleotide sequence identical to or substantially identical to a nucleotide sequence in a central flap nucleic acid sequence of a human immunodeficiency virus retrovirus, wherein the central flap nucleic acid comprises a sequence capable of forming a quadruplex structure, and wherein the central flap nucleic acid comprises the nucleotide sequence CAG₄AA (SEQ ID NO:2), and

detecting an interaction between the test molecule and the nucleic acid, whereby a test molecule that interacts with the nucleic acid is identified as an antiviral candidate molecule.

2. (currently amended): The method of claim 1, wherein the human immunodeficiency virus retrovirus is ~~selected from the group consisting of human immunodeficiency virus (HIV-1) or human immunodeficiency virus HIV-2, simian immunodeficiency virus (SIV), visna/maedi virus (VMV), caprine arthritis-encephalitis virus (CAEV), equine infectious anaemia virus (EIAV), feline immunodeficiency virus (FIV), bovine immunodeficiency virus (BIV), murine leukemia virus (MLV), human immunodeficiency virus (HIV), equine infectious anaemia virus (EIAV), mouse mammary tumor virus (MMTV), Rous sarcoma virus (RSV), Fujinami sarcoma virus (FuSV), Moloney murine leukemia virus (Mo-MLV), FBR murine osteosarcoma virus (FBR-MSV), Moloney murine sarcoma virus (Mo-MSV), Abelson murine leukemia virus (A-MLV), avian myelocytomatosis virus-29 (MC29), and avian erythroblastosis virus (AEV).~~

3-5. (cancelled)

6. (original): The method of claim 1, wherein the nucleic acid comprises the nucleotide sequence TTG₆TACAGTGCAG₄AA.

7. (original): The method of claim 1, wherein the nucleic acid is incubated in a solution comprising potassium ions.

8. (original): The method of claim 1, wherein the quadruplex is an intermolecular structure.

9. (previously presented): The method of claim 8, wherein the quadruplex is an intermolecular parallel structure.

10. (previously presented): The method of claim 8, wherein the quadruplex is an intermolecular structure formed by a dimer of two intramolecular hairpin structures.

11. (original): The method of claim 1, wherein the interaction is detected by circular dichroism.

12. (original): The method of claim 1, wherein the interaction is binding of the test molecule to the nucleic acid.

13-14. (cancelled)

15. (currently amended): The method of claim [[14]] 1, wherein the ~~system is~~ contacting occurs in a cell.

16. (currently amended): The method of claim [[14]] 15, wherein the ~~system is~~ cell is taken from a subject.